

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

SEP 2 4 2015

REPLY TO THE ATTENTION OF:

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Bill Bougher, Environmental Engineer Steel Dynamics, Inc. 2601 South County Road 700 East Columbia City, Indiana 46725

Re:

Notice of Violation and Finding of Violation Steel Dynamics, Inc., Columbia City, Indiana

Dear Mr. Bougher:

The U.S. Environmental Protection Agency is issuing the enclosed Notice of Violation and Finding of Violation (NOV/FOV) to Steel Dynamics, Inc. (SDI) under Section 113(a)(1) and (a)(3) of the Clean Air Act, 42 U.S.C. § 7413(a)(1) and (a)(3). We find that SDI is violating the New Source Performance Standards, the National Emission Standards for Hazardous Air Pollutants, and its Title V permits at the facility in Columbia City, Indiana.

Section 113 of the Clean Air Act gives us several enforcement options. These options include issuing an administrative compliance order, issuing an administrative penalty order, and bringing a judicial civil or criminal action.

We are offering you an opportunity to confer with us about the violations alleged in the NOV/FOV. The conference will give you an opportunity to present information on the specific findings of violation, any efforts you have taken to comply, and the steps you will take to prevent future violations. In order to make the conference more productive, we encourage you to submit information responsive to the NOV/FOV to us prior to the conference date.

Please plan for your technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference.

The EPA contact in this matter is Alexandra Letuchy. You may call her at (312) 886-6035 to request a conference. You should make the request within 10 calendar days following receipt of this letter. We should hold any conference within 30 calendar days following receipt of this letter.

Sincerely,

George T. Czerniak

Air and Radiation Division

Enclosure

cc: Phil Perry, Chief, Air Compliance and Enforcement Branch, IDEM

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5

IN THE MATTER OF:)
G. ID)
Steel Dynamics, Inc.) NOTICE OF VIOLATION and
Columbia City, Indiana) FINDING OF VIOLATION
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) EPA-5-15-IN-12
Proceedings Pursuant to)
Clean Air Act, 42 U.S.C. § 7401	j ,
)

NOTICE AND FINDING OF VIOLATION

The U.S. Environmental Protection Agency (EPA) is issuing this Notice of Violation and Finding of Violation (NOV/FOV) under Sections 113(a)(1) and (a)(3) of the Clean Air Act (the Act), 42 U.S.C. § 7413(a)(1) and (a)(3). EPA finds that Steel Dynamics, Inc. (SDI) is violating the New Source Performance Standards, the National Emission Standards for Hazardous Air Pollutants, and its Title V permits, at its Columbia City, Indiana facility (the Facility) as follows:

Statutory and Regulatory Authority

1. All terms in the following numbered paragraphs shall have their ordinary meaning, unless such terms are defined in the Act, 42 U.S.C. §§ 7401 to 7671(q), or Volume 40 of the Code of Federal Regulations, in which case such statutory or regulatory definitions shall apply.

New Source Performance Standards

- 2. Section 111(b) of the Act, 42 U.S.C. § 7411(b), requires EPA to publish a list of categories of stationary sources and, within a year after the inclusion of a category of stationary sources in the list, to publish proposed regulations establishing federal standards of performance for new sources within the source category. These emission standards are known as the New Source Performance Standards (NSPS). EPA codified these standards at 40 C.F.R. Part 60.
- 3. 40 C.F.R. Part 60, Subpart A (NSPS Subpart A) contains the General Provisions for the NSPS.
- 4. The provisions of NSPS Subpart A apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication in this part of any standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility. 40 C.F.R. § 60.1(a).

and maintenance of the affected facility. Operation at such values shall be reported to the Administrator semiannually."

National Emission Standards for Hazardous Air Pollutants

- 12. Section 112 of the Act, 42 U.S.C. § 7412, requires EPA to promulgate a list of all categories and subcategories of major sources and area sources of hazardous air pollutants (HAP) and establish emissions standards for the categories and subcategories. These emission standards are known as the National Emission Standards for Hazardous Air Pollutants (NESHAP). EPA codified these standards at 40 C.F.R. Parts 61 and 63.
- 13. "Hazardous air pollutant" means "any air pollutant listed in or pursuant to" Section 112(b) of the Act. 42 U.S.C. § 7412(a)(6).
- 14. "Major source" means any stationary source that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant, or 25 tons per year or more of any combination of hazardous air pollutants. *See* 42 U.S.C. § 7412(a)(1).
- 15. 40 C.F.R. Part 63, Subpart A, contains the General Provisions for the NESHAP.
- 16. 40 C.F.R. § 63.6(e)(1)(i) states, in pertinent part, at all times, including periods of startup, shutdown, and malfunction, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.

The NESHAP for Electric Arc Furnace Steelmaking Facilities

- 17. Pursuant to Section 112 of the Act, EPA promulgated the NESHAP for EAF Steelmaking Facilities at 40 C.F.R. Part 63, Subpart YYYYY, 40 C.F.R. §§ 63.10680-63.10692, on December 28, 2007. 72 Fed. Reg. 74,111 (Dec. 28, 2007).
- 18. The NESHAP at 40 C.F.R. Part 63, Subpart YYYYY applies to an owner or operator of an EAF steelmaking facility that is an area source of HAP emissions. *See* 40 C.F.R. § 63.10680(a).
- 19. Table 1 of 40 C.F.R. Part 63, Subpart YYYYY incorporates 40 C.F.R. § 63.6(e)(1)(i) by reference.
- 20. 40 C.F.R. § 63.10681(a) states that the compliance date for an existing affected source is June 30, 2008.
- 21. 40 C.F.R. § 63.10680(b) states that 40 C.F.R. Part 63, Subpart YYYYY applies to each existing affected source, where an affected source is each EAF steelmaking facility. An affected source is existing if construction or reconstruction of the affected source was commenced on or before September 20, 2007. 40 C.F.R. § 63.10680(b)(1).

- 34. IDEM issued a Part 70 Operating Permit, No 183-32321-00030, on October 15, 2014 (2014 Title V Permit).
- 35. IDEM issued a Part 70 Operating Permit, No 183-35612-00030, on April 24, 2015 (April 2015 Title V Permit).
- 36. IDEM issued a Part 70 Operating Permit, No 183-35899-00030, on July 7, 2015 (July 2015 Title V Permit).
- 37. Condition D.1.5(b) of the 2013 Title V Permit (and of subsequent permit revisions) states that the total carbon monoxide (CO) emissions from the EAF Baghouse stack (stack 1) and ladle metallurgical station (LMS) Baghouse stack (stack 43) shall not exceed 2.0 pounds per ton of steel produced and 600 pounds of carbon monoxide (CO) per hour, based on a three hour block average.
- 38. Condition D.1.5(a) of the 2009 Title V Permit states that filterable particulate emissions from EAF-1A and EAF-1b shall be controlled by the EAF Baghouse.
- 39. Condition D.1.6(a)(1) of the 2013 Title V Permit and of subsequent permit revisions states that EAF Baghouse for particulate control shall be in operation and control filterable particulate emissions at all times that EAF-1a or EAF-1b is in operation.
- 40. Condition D.1.5(e) of the 2009 Title V Permit and Condition D.1.6(d) of the 2013 Title V Permit and of subsequent permit revisions state that the meltshop shall be located in a total enclosure subject to general ventilation that maintains the meltshop at a lower than ambient pressure to ensure in-draft through any doorway opening. Ventilation air from the total enclosure shall be conveyed to the EAF Baghouse.

Relevant Factual Background

- 41. SDI owns and operates a stationary steel mini-mill at 2601 South County Road 700 East in Columbia City, Indiana.
- 42. The EAF at the Facility is subject to 40 C.F.R. Part 60, Subpart AAa, because it was constructed after August 17, 1983, and is subject to 40 C.F.R. Part 63, Subpart YYYYY, because it is an area source for metal HAPs.
- 43. EPA conducted an inspection of the Facility on April 8, 2013. EPA returned to the Facility on March 17, 2015 for additional observations.
- 44. EPA issued SDI an information request under Section 114 of the Act on April 28, 2014 (2014 Information Request). SDI submitted a response on August 4, 2014 (2014 Information Request Response).

CO Emission Limit Exceedance

45. SDI exceeded the total CO emissions pounds per hour limit of the 2013 Title V Permit at the EAF Baghouse stack (stack 1) and LMS Baghouse stack (stack 43), based on a three-

Date	Time	Opacity Reading (%)
March 19, 2015	12:30-12:35	4.17
	13:06-13:11	4.38
March 20, 2015	9:54 – 9:59	0.83
	10:06-10:11	1.25
	10:18 - 10:23	0.63
	10:24 - 10:29	5.00
	10:30-10:35	0.42

Alleged Violations

- 52. By exceeding the CO emissions limit from the EAF Baghouse stack (stack 1) and LMS Baghouse stack (stack 43), SDI violated Condition D.1.5(b) of the 2013 Title V Permit and of subsequent permit revisions.
- 53. By operating at a furnace static pressure that exceeds the value established under 40 C.F.R. § 60.274a(g) and operating the fan motor amperes at values exceeding +/- 15 percent of the value established under 40 C.F.R. § 60.274a(c), SDI violated 40 C.F.R. § 60.11(d) and failed to demonstrate compliance with § 60.272a(a)(3).
- 54. By discharging gases from the melt shop that exhibited opacity greater than 0% on a 6-minute average basis, SDI violated Condition D.1.6(d) of the 2014 Title V Permit.
- As demonstrated in the 2014 Ventilation Assessment, SDI failed to operate its air pollution control equipment in a manner that ensured that emissions from the EAF were conveyed to the EAF Baghouse and thus violated Condition D.1.5(a) of the 2009 Title V Permit, Condition D.1.6(a)(1) of the 2013 Title V Permit and of subsequent permit revisions, as well as, 40 C.F.R. § 60.11(d), 40 C.F.R. § 63.6(e)(1)(i), and 40 C.F.R. § 63.10686(a).

Environmental Impact of Violations

56. These violations have caused excess emissions of PM and CO:

<u>Particulate Matter</u>: Particulate matter, especially fine particulates, contains microscopic solids or liquid droplets, which can get deep into the lungs and cause serious health problems. Particulate matter exposure contributes to:

- irritation of the airways, coughing, and difficulty breathing;
- decreased lung function;
- aggravated asthma;
- chronic bronchitis;
- irregular heartbeat;
- nonfatal heart attacks; and
- premature death in people with heart or lung disease.

CERTIFICATE OF MAILING

I, <u>lauta Sna Cha</u>, certify that I sent a Finding of Violation, No. EPA-5-15-IN-, by Certified Mail, Return Receipt Requested, to:

Bill Bougher, Environmental Engineer Steel Dynamics, Inc. 2601 South County Road 700 East Columbia City, Indiana 46725

I also certify that I sent copies of the Finding of Violation by first-class mail to:

Phil Perry, Chief
Air Compliance and Enforcement Branch
Indiana Department of Environmental
Management
100 N. Senate Ave.
Mail Code 61-53 IGCN 1003
Indianapolis, IN 46204-2251

On the <u>34</u> day of <u>September</u> 2015.

Loretta Shaffer, Program Technician AECAB, PAS

CERTIFIED MAIL RECEIPT NUMBER: 7014 2870 0001 9581 3123